

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/765,378

REMARKS

Claims 1-5 are all the claims pending in the application.

By the present Amendment, Applicants propose to amend claim 1.

Claims 1-5 stand rejected as allegedly being unpatentable over previously-cited Ohno et al. (US 5,498,860) in view of previously-cited Nakajima (US 5,408,531). Applicants respectfully traverse the rejection as set forth below.

Applicants submit that the prior art fails to teach or suggest all of the limitations of the claims of the present invention. In particular, the applied references fail to teach or suggest an error detecting portion for detecting an error in at least one of the two demodulated data; and an error correcting portion for correcting the error, which is detected by said error detecting portion, by using the other demodulated data, as recited in independent claim 1. The Examiner concedes that Ohno does not disclose these features of the claim, but asserts that Nakajima makes up for Ohno's deficiencies in this regard. Applicants respectfully disagree.

The Examiner refers to col. 4, line 59 - col. 5, line 38+ of Nakajima as allegedly disclosing the aforementioned features of claim 1. The cited excerpt of Nakajima discloses replacement of data in the range exceeding the largest error correcting ability which can be corrected by the decoding circuit 9. However, the reference fails to disclose detecting an error in at least one of the two demodulated data, which are obtained from the same data and are stored separately. Furthermore, Nakajima does not disclose using one demodulated data to error correct the other demodulated data. Therefore, even after combining the teachings of Nakajima with the teachings of Ohno, the applied references still fail to teach or suggest all of the limitations of claim 1.

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Additionally, Applicants submit that the applied references fail to teach or suggest all of the limitations of independent claim 1, as proposed to be amended. In particular, the references do not teach or suggest the demodulating circuits for independently demodulating digital signals obtained from the same data. In fact, Ohno et al. are silent regarding demodulating digital signals in any manner. Also, Nakajima fails to make up for this deficiency of Ohno et al. Nakajima discloses a demodulating circuit 46, but the demodulating circuit 46 demodulates a signal output from a photo detector 45, which receives light reflected from an optical card 44. Thus, the demodulating circuit 46 of Nakajima does not independently demodulate digital signals obtained from the same data. Therefore, Applicants submit that claim 1 and its dependent claims 2 and 3 are allowable over the prior art, for at least this reason.

Furthermore, Applicants submit that the applied references do not teach or suggest two magnetic heads arranged in a direction, in which each of the magnetic heads relatively moves with respect to the magnetic card, and taking the same data from the magnetic card and obtaining two demodulated data with a single movement of the magnetic card relative to the magnetic heads. As shown in FIG. 7, when the prepaid card 30 is inserted in the card insertion port 31, the CPU 40 receives a signal from a card insertion detector to drive the card convey/drive system, thus conveying the prepaid card 30 to the magnetic read head 32 (step S1). The magnetic read head 32 reads information associated with the current balance and the current section from the magnetic recording layer 21 of the prepaid card 30 (step S2). The read information is sent to the CPU 44 of the balance/braille recording designation section 41 via the circuit 45. The CPU 44 calculates a fare by referring to the fare table 42 on the basis of the section information, and calculates a new balance (step S3). The new balance information calculated in this manner is

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written on the magnetic recording layer 21 by the magnetic write head 33, thus updating the balance information on the magnetic recording layer 21 (step S4). The updated balance information is read by the magnetic read head 34 and collated with the updated balance information stored by the CPU 44, thereby determining whether the balance information is properly updated (step S5). See col. 6, line 58 - col. 7, line 6.

In other words, magnetic read head 32 reads current balance information and magnetic read head 34 reads the updated balance information that was written by the magnetic write head 33. Thus, magnetic read heads 32 and 34 do not read the same data from the magnetic card. The Examiner asserts in the "Response to Arguments" that if a user chooses not to use a desired service, no fee would be subtracted from the balance and thus the updated balance would be the same as the balance initially read. However, as acknowledged by the Examiner, Ohno et al. disclose updating the balance information between the first and second reading of the balance information. Thus, although the value of the data may be the same for the first reading and the second reading of the balance information in the Examiner's example, the actual data is not the same, because the data is updated between these two readings, as taught by Ohno et al.

Therefore, Ohno et al. do not disclose or suggest the above-identified features of independent claim 1.

Since Nakajima fails to make up for this deficiency of Ohno et al., claim 1 and its dependent claims 2 and 3 are believed to be allowable for this additional reason. Also, Applicants submit that claims 4 and 5 are allowable for reasons analogous to those presented above.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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